

**The Chinese University of Hong Kong
Department of Psychiatry
Schedule for March, 2024**

<u>Date</u>	<u>Time</u>	<u>Activity</u>	<u>Speaker(s)</u>
Mar7	14:30-15:30	Clinical Case Conference & Journal Club*# <i>Transitioning from methamphetamine induced psychosis to schizophrenia</i>	Dr. King WONG Supervisor: Dr. Fu CHAN
	15:30-16:30	Research Seminar* <i>Suicidal Ideation Detection in Cantonese Speech during clinical consultation</i>	Ms. Phoebe CHAN Supervisor: Dr. Tim LI
	16:30-17:30	Research Seminar* <i>Smartphone based digital phenotyping of motor and non-motor biomarkers across early stages of a-synucleinopathies</i>	Ms. Maggie HE Supervisor: Prof. YK WING Co-supervisors: Dr. Rachel CHAN, Dr. Tim LI
Registration: https://bit.ly/42Jra3g			
Mar14	14:30-16:00	Psychotherapy Case Conference (SH)*# <i>Balint group supervision</i>	SH Trainees Moderator: Dr. Irene KAM
	16:00-17:00	Psychotherapy Supervision (SH)*#	
Mar21		No Event	
Mar28	14:30-16:30	Quality Assurance Meeting (SH)#/(TPH)#	
Venue:	*Live video #Closed meeting	@Non-CME Event	MUL TPH SH 1AL
		Seminar Room, Multi-centre, Tai Po Hospital, Tai Po, N.T.	Conference Room 1 G/F, Wing D Tai Po Hospital Tai Po, N.T.
		Dining Room, Ward 7AB, Dept. of Psychiatry, 7/F, Shatin Hospital, Shatin, N.T.	Rm. 1005, Dining Room Ward 1AL, 1/F Tai Po Hospital Tai Po, N.T.

Please contact 2607-6025 two days before hand to arrange presentation equipment.

<http://www.psychiatry.cuhk.edu.hk>



Research Seminar

Date: 7 Mar 2024 (THU)

Time: 15:30 – 16:30

Venue: Zoom

Register Now



Ms. Phoebe CHAN

Supervisor: Dr. Tim LI

Topic: Suicidal Ideation Detection in Cantonese Speech during clinical consultation

Abstract:

Suicide is a leading cause of premature and preventable death, making it crucial to screen for suicide risk, especially among the psychiatric population, in healthcare settings. Suicidal ideation (SI) is a significant risk factor for suicidal death and is a matter of great clinical concern. Currently, the detection of suicide risk relies on clinical judgment, supplemented by self-report tests and structured interviews. However, a previous study found that healthcare providers had poor agreement when rating suicide risk. Furthermore, assessing SI in patients is particularly challenging, especially when they deny experiencing SI due to the social taboo surrounding suicide. Moreover, frequent and focused assessments of SI can burden patients and cause discomfort, especially when consultation time is limited.

To address these challenges, researchers and clinicians have turned to artificial intelligence (AI) techniques, such as natural language processing (NLP) and machine learning (ML), to aid in evaluating patients' mental states by analyzing implicit language-based cues. The Linguistic Inquiry and Word Count (LIWC) dictionary is commonly used in psychiatric research to categorize words into linguistically and psychologically meaningful categories. Recent systematic reviews have shown that first-person singular pronouns (e.g., I, my, me) and negative emotion words (e.g., sad, angry, anxious) are linguistic features associated with suicidal individuals. By utilizing ML methods, researchers can identify explicit suicide expressions (e.g., suicide notes) and texts authored by individuals at risk of suicide (e.g., songs, poems, diaries). Previous studies have successfully employed ML models with LIWC features to screen for suicide risk on social media platforms.

Conversely, using patients' speech responses during routine clinical consultations for the detection of SI would not impose additional burdens on patients or clinicians. Therefore, there is an urgent need to develop an automated speech-based detection system that can unobtrusively capture language features associated with SI and promptly inform clinicians of any suspected SI.

This study aims to explore the feasibility and effectiveness of a Cantonese speech-based system for detecting suicidal ideation. The investigation will involve analyzing patient verbal responses, examining preliminary statistical results to explore the associations between language features and suicidal ideation.



Registration is required. For enquiries, please contact pci-event-app@cuhk.edu.hk or 26076025.
Please display the registration name for joining the Zoom lecture.



Research Seminar

Date: 7 Mar 2024 (THU)

Time: 16:30 – 17:30

Venue: Zoom

Register Now



Ms. Maggie HE

Supervisor: Prof. YK WING

Co-supervisors: Dr. Rachel CHAN, Dr. Tim LI

Topic: Smartphone-based digital phenotyping of motor and non-motor biomarkers across early stages of α -synucleinopathies

Abstract:

Parkinson's disease (PD), or the boarder term, α -synucleinopathies, is the second-most common neurodegenerative disease characterised by a series of motor and non-motor symptoms. However, currently, there is a lack of reliable methods to detect the disease features and signs at early stages. The majority of patients are diagnosed with the aid of conventional clinical assessments, such as the Unified Parkinson's Disease Rating Scale, at which these patients have already experienced severe motor dysfunction that has reflected substantial neuronal loss in the neural circuit. In addition, conventional clinical assessments are subjected to the need for trained assessors and inter-rater variability. Thus, it is crucial to develop a more sensitive and reliable tool to identify disease-related symptoms/signs at its early stages.

In this regard, advancements in digital mobile technology have allowed unobtrusive, refined, and early assessment in the field of clinical medicine and research. Smartphone-based digital assessments, utilizing built-in sensors, offer objective and accurate data collection. Nevertheless, previous studies have only applied digital tools to assess a single or a specific group of functions in patients with full-blown α -synucleinopathies. In other words, these digital measures have not been well studied in patients with isolated rapid eye movement sleep behaviour disorder (iRBD), a specific prodromal stage of α -synucleinopathies. Additionally, these digital assessments have not been applied to an even earlier prodromal stage of RBD characterised by subclinical RBD features and a higher risk of developing full-blown RBD and neurodegeneration.

Therefore, in this study, we aimed to 1) develop a smartphone application containing a comprehensive battery of assessments, including neurocognition, motor functions, impulsivity, voice, and facial expression; 2) validate the smartphone-based digital assessments, including test-retest reliability, construct validity, and criterion validity, and evaluate its acceptability and feasibility; 3) conduct a cross-sectional case-control study to capture the motor and non-motor signs in early stages of α -synucleinopathies, especially in iRBD patients and their first degree relatives (FDRs). The potential findings of this study will facilitate better capture of a series of motor and non-motor features in the early and prodromal stages that will help the future development of neuroprotection strategies for α -synucleinopathies.



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